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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/514,369	02/28/2000	Takayuki Shinohara	49657-625	9468
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MCDERMOTT WILL & EMERY 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096				
			EXAMINER CONTEE, JOY KIMBERLY	
			ART UNIT 2686	PAPER NUMBER 15

DATE MAILED: 01/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/514,369

Applicant(s)

SHINOHARA ET AL.

Examiner

Joy K Contee

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 16-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 10/21/2003 have been carefully considered but are not persuasive for the following reasons.

Examiner, Joy Contee will be taking over the docket for this case. However, Examiner maintains and further uses the Kuroda reference and maintains the previously filed arguments, which follow. With respect to new independent claim 12, Examiner also asserts that Kuroda inherently teaches information serially readout in synchronization with a clock signal (see Fig. 28). Also, Applicant states that the previous Examiner did not address the "working area" for RAM; however, Kuroda specifically states that the RAM can be used as work area for rewriting or a data buffer area (col. 6, lines 17-24).

Applicant argues that Kuroda reference does not teach that the flash memory is a file storage flash memory for storing a program for the control portion, and transmission and reception data in a non-volatile manner under a control of the control portion, and further argues that the part that the Examiner relies upon to reject the claim is about a microcomputer rather than a telephone device. It should be kept in mind that Kuroda teaches the flash memory circuit and its implementation in various devices, including a cordless phone, and the part of the teaching about a microcomputer also applies to the implementation of such teaching, such as the telephone device. The telephone device of Kuroda reference contains a CPU, hence every function of the CPU taught by Kuroda also applies to the telephone.

Applicant further argues that Kuroda does not teach or suggest the claimed file storage flash memory for storing program for the control portion. This is not true. Kuroda repeatedly teaches that the flash memory stores not only the data, but also the program to be executed by the CPU (Col.5, Lines 30-33; Co1.6, Lines 21-23).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-4, 7 and 9-19 are rejected under 35 U.S. C. 102(b) as being anticipated by Kuroda et al. (U.S. Patent 5,444,664).

Regarding Claims 1 and 12, Kuroda discloses a memory system for a portable telephone including a signal transmission/reception portion for transmitting and receiving a signal and a control portion for controlling at least a signal transmission and reception operation of said transmission/reception portion, comprising:

a random access memory (RAM) providing a working area for said control portion (col. 6, lines 17-22); and

a flash memory (Fig. 41, **FLASH**) including a memory array (see Fig. 26, **ARY**) for storing a program for said control portion (CPU) and at least transmission and reception

data (i.e., reads on voice information, e.g., a person leaving a message in memory or phone conversation (transmitted/received data in real-time) may be recorded into memory) in a non-volatile manner under a control of said control portion, said memory array being divided into a plurality of storage units, and a register, provided commonly to the respective storage units, having information in a storage unit of said plurality of storage units transmitted thereinto and allowing serial readout (i.e., inherently in synchronization with a clock signal, see Figs. 1 and 28, SCI TMR, serial communication interface with timer) of the transmitted information (Col. 32, line 61 to Col. 33, line 2).

Regarding Claim 2, Kuroda teaches the memory system for the portable telephone according to claim 1, wherein said random access memory and said flash memory are coupled to an internal bus interconnecting said control portion and said signal transmission/reception portion (It is inherent, as can be seen in Fig.41, that the RAM and the flash memory are coupled to an internal bus interconnecting all major parts of the mobile phone, including the control portion and the transmission/reception portion).

Regarding Claim 3, Kuroda teaches the memory system for the portable telephone according to claim 2 comprising a bus converting circuit connected between said file storage flash memory and said internal bus and functioning as an interface circuit for said file storage flash memory (see Fig. 1, LDBSUS and HDBUS, col. 19, lines 58-67),

Regarding Claim 4, Kuroda teaches the memory system for the portable telephone according to claim 3, wherein said file storage flash memory and said bus converting circuit are integrally formed into a memory card (Fig.43 shows a memory card, and the bus converting circuit could be part of the input/output circuit shown as I/O in Fig.43; Col. 34, Lines 11-13) attachable and detachable to and from said portable telephone.

Regarding Claim 7, Kuroda teaches the memory system for the portable telephone according to claim 1, wherein said flash memory comprises an AND type flash memory (Col. 9, Lines 43-47).

Regarding Claims 9 and 13, Kuroda teaches the memory system for a portable telephone according to claims 1 and 12, respectively, wherein a program stored in the storage unit of said plurality of storage units is serially read out to the RAM to be executed (Col. 5, Lines 30-32, Note that "the stored information to be processed by the CPU" indicates that the stored program bits are read out from the memory and into the CPU in a serial fashion as shown in Fig.28).

Regarding Claims 10 and 14, Kuroda discloses the limitations of claims 1 and 12, respectively, wherein said control portion performs a process using the RAM as an instruction memory to which the program is serially transferred from the flash memory (col. 6, lines 10-43).

Regarding Claims 11 and 15, Kuroda discloses the limitations of claims 1 and 15, respectively wherein said control portion stores transmission and reception data into said RAM as a buffer memory, and transfers the stored transmission and reception data from the RAM to the flash memory (col. 6, lines 10-24).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 5,6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuroda.

Regarding Claim 5, Kuroda teaches the memory system for the portable telephone according to claim 3, wherein said file storage flash memory is constituted of a memory card (Fig.43 shows a memory card, and the bus converting circuit could be designed not as a part of the input/output circuit shown as I/O in Fig.43, but as a part of the bus circuit in the mobile phone; Col. 34, Lines 11-13) being attachable and detachable to and from said bus converting circuit.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to have the bus converting circuit formed into an adaptor to interconnect the mobile phone and the memory card for the purpose providing a design choice that the bus converting circuit can be built into the mobile phone's bus circuit, or on the memory card, or being independent of either and by itself as an adapter between the phone and the memory card.

Regarding Claim 6, Kuroda teaches the memory system for the portable telephone according to claim 1, but is silent on said control portion, said random access memory and said file storage flash memory being integrally formed as a control unit.

However, it is a design choice, and it would have been obvious for one of ordinary skill in the art at the time the invention was made to have said control portion, said random access memory and said file storage flash memory being integrally formed for the purpose of having an integrated control unit.

Regarding Claim 8, Kuroda teaches the memory system for the portable telephone according to claim 5, wherein said bus converting circuit is attachable and detachable to said portable telephone (Co1.34, Lines 34-35, Note: replaceable indicates that it is attachable and detachable). Kuroda does not teach that the bus converting circuit is formed into an adapter.

It would have been obvious for one of ordinary skill in the art at the time the invention was made to have the bus converting circuit formed into an adaptor to interconnect the mobile phone and the memory card for the purpose providing a design choice that the bus converting circuit can be built into the mobile phone's bus circuit, or on the memory card, or being independent of either and by itself as an adapter between the phone and the memory card.

Allowable Subject Matter

6. Claim 16-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claims 17 and 19, Kuroda fails to disclose the limitations of claims 1 and 12, wherein the memory system for a portable telephone has storage units that are each formed of a sector. Regarding claims 16 and 18, Kuroda fails to disclose the limitations of claims 1 and 12, respectively, wherein one unit of the storage units comprises a storage capacity ranging from 512 bytes to 2K bytes.

Conclusion

7. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K. Contee whose telephone number is 703-308-0149. The examiner can normally be reached on 5:30 am to 2:00 p.m, Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for all communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Joy Contee

January 12, 2006



CHARLES APPIAH
PRIMARY EXAMINER